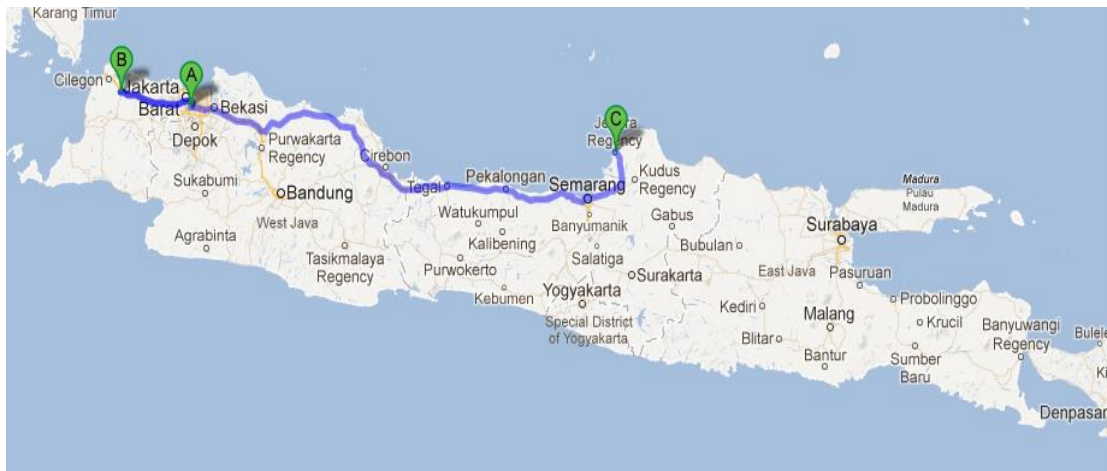


**Accessing Environmental Information:**  
**Water – Pulp and Paper Industry Study**  
**PT Indah Kiat Pulp and Paper – Serang**

Ciujung river flows from Lebak Regency, disemboque at Banten Bay, Serang Regency.<sup>1</sup> Ciujung River is the longest river in Banten Province and has significant importance to fulfill the needs of community, i.e. for bathing, washing, and as natural toilet especially for the people living along the river, such as community of Pontang<sup>2</sup>, Tirtayasa<sup>3</sup> and Tanara (Pontirta) Regency, Banten Province.

Map of Serang



Note: A: Jakarta Area, B: Serang

Access of communities to water is quite limited. Generally, community of Pontang, Tirtayasa and Tanara fulfill their needs of water towards river, Local Government's Water Company, artesian well, and rainwater.<sup>4</sup> Nevertheless, the quality of Ciujung River keeps degrading. Industrial activity along Ciujung River has allegedly worsened the water quality of the river.<sup>5</sup> The amount of liquid waste from industries dumped to Ciujung River reached 43,044.35 m<sup>3</sup>/day.<sup>6</sup> The documented contribution of industrial waste dumping to Ciujung River is as follow:

**Table 1. Contribution of Industrial Waste Discharge to the Ciujung River**

<sup>1</sup> Monitoring Report, Condition and Toxicity of Industrial Waste at Ciujung River, Center for Research and Development on Fisheries, 1993

<sup>2</sup> Pontang Regency is consisted of 15 villages, having population of 51.811 souls. Source: Serang Regency in Number 2010, Central Statistic Body, Serang Regency

<sup>3</sup> Tirtayasa Regency is consisted of 14 villages, having population of 41.382 souls. Source: Serang Regency in Number 2010, Central Statistic Body, Serang Regency

<sup>4</sup> Interview to society, February 2010

<sup>5</sup> Polluted condition was medium – heavy, located in the area of Kragilan and Tirtayasa. Sources: Euis Nursetiya Supartiwi, 2000, *Karakteristik Komunitas Fitoplankton dan Perifiton Sebagai Indikator Kualitas Lingkungan Sungai Ciujung, Jawa Barat* (En: Characteristic of Fitoplankton and Perifiton Community as Indicator of Ciujung River Environmental Quality, West Java <http://repository.ipb.ac.id/bitstream/handle/123456789/23928/C00ENS.pdf?sequence=2>)

<sup>6</sup> Environmental Monitoring Board of Serang, 2011

| No | Companies                    | Waste Debit<br>(m <sup>3</sup> /day) | Contribution<br>(%) |
|----|------------------------------|--------------------------------------|---------------------|
| 1  | PT Indah Kiat Pulp and Paper | 40.000                               | 92.93               |
| 2  | PT Cipta Paperia (Paper)     | 1.555                                | 3.61                |
| 3  | PT Pichon (Leather)          | 4.2                                  | 0.01                |
| 4  | PT Intercipta (Chemical)     | 10                                   | 0.02                |
|    | <b>Total</b>                 | <b>41.569,2</b>                      |                     |

Total of industrial waste water discharge to Ciujung river: 43.044,35 m<sup>3</sup>/day

**Table 14. Contribution of Industrial Waste Discharge to Cikambuy River (Branch of Ciujung River)**

| No | Companies                                                         | Waste Debit<br>(m <sup>3</sup> /day) | Contribution<br>(%) |
|----|-------------------------------------------------------------------|--------------------------------------|---------------------|
| 1  | PT CPJF (Charoen Pokphand Jaya Farm)                              | 1.461                                | 3.39                |
| 2  | PT JM Mutu (chemicals of oil drilling, mud, cementing production) | 0.1                                  | 0.00023             |
| 3  | PT Lapi Laboratories (pharmaceutical company)                     | 5                                    | 0.116               |
| 4  | PT Berry (fertiliser distributor)                                 | 6.7                                  | 0.0156              |
| 5  | PT Yarindo (pharmaceutical company)                               | 1.8                                  | 1.0042              |
| 6  | PT Kuangling Ceramic (Cheramics products)                         | 0.05                                 | 0.000116            |
| 7  | PT Fajar Purnama Pratama (chemicals)                              | 0.5                                  | 0.00116             |
|    | <b>Total</b>                                                      | <b>41.569,2</b>                      |                     |

Source: BPLH Serang, 2011

The degradation of Ciujung River water quality raises protests and restlessness from community around the Ciujung River, especially in Pontang, Tirtayasa and Tanara. Society conducted protests and push government to overcome the Ciujung River pollution<sup>7</sup>. Besides pollution, community also does not get information related to industrial activity along the Ciujung River and its consequence to environment, specifically the liquid waste of PT IKPP which is dumped to Ciujung River in considerable amount.

Through STRIPE, the team consisted of Indonesian Center for Environmental Law, WALHI and *Forum Kebangkitan Petani dan Nelayan* (FKPN, En: Revival of Farmers and Fishermen Forum) with The Access Initiative work together to empower community in Pontang area to improve the quality of life and environment through access of information, based on Ciujung River pollution from pulp and paper industry study case.

<sup>7</sup>Protes Pencemaran Sungai Ciujung, 19 Oktober 2011, <http://beritadaerah.com/denyuts/getContent/43120>

Under the STRIPE project, STRIPE Team- Indonesia, did not only captured the fulfillment of right to environmental information, but also analyzing the information obtained and assisting community members to understand more about the problem and capturing the condition related to the water pollution control and pulp and paper industry activities. Thus, it is found that:

1. **The national quality standard of liquid waste in the pulp and paper industry as regulated in the Ministry of Environment Decree No. Kep-51/MENLH/10/1995 has not covered specific chemicals standard.** In this matter, the standard of chlorinated organic compound (*Adsorbable Organic Halide, AOX*), *chlorinated phenolic compounds, TCDD2 (2,3,7,8-tetrachlorodibenzo-p-dioxin), TCDF3 (2,3,7,8-tetrachlorodibenzofuran)*. In other countries such as Brazil, Canada and USA, have already had the AOX<sup>8</sup> Standard. AOX is one of the pollutant produced as the consequence of chlorine (Cl<sub>2</sub>) utilization in the bleaching process of pulp<sup>9</sup>.
2. **Management and Control of River Water Pollution**
  - a) **There is no explication upon Ciujung River's Water Class.** Banten Province Regional Government has not established Water Class for Ciujung River<sup>10</sup>. Based on Government Regulation no. 82 of 2001, in case of absence of clear stipulation, the Water Class shall be Class II, however based on the laboratory test there are many findings on violations of Class II;<sup>11</sup>
  - b) **All parameters based on GR No. 82 of 2001 have never been used completely to test the river water quality in laboratory.** In the GR No. 82 of 2001, there are 52 parameters to measure river water quality, however in the quality measurement of Ciujung River, there are only 23 parameters taken into examination and there is no further explanation;
  - c) **The determination of waste volume allowed to be dumped into the River is not done with measuring the capacity and carrying capacity of the river;**

### 3. Access to Clean Water

- a) Laboratory result for community's drinking water contains parameter violations, as follows:

**PDAM Water:** the test conducted at November 2, 2011 in one location and November 18, 2011 in three location, three of them show the content of e-coli which is surpass the standards of Ministry of Health No. 492/MENKES/PER/IX/2010.

**Drilled Well:** the test conducted at June 7, 2011 in three location, the first location showed contents of TDS, Chloride, and NO<sub>2</sub> surpassing the standard of Ministry of Health no. 416/MENKES/PER/IX/1990; furthermore the second and third showed contents of TDS, Chloride, Sulfate, and NO<sub>2</sub> surpassing the standards. And then the test also be conducted at July 12, 2012, in one of the location, the result shows contents of TDS, Chloride, and NO<sub>2</sub> surpassing the standards.

---

<sup>8</sup>USA (0,623 kg/ADT), Brazil (0.2 – 1.0 kg/ADT), Canada (1.5 kg/ADT)

<sup>9</sup>Yasmidi, Roosmini Dwina, Analisis Kandungan Senyawa Organik Terklorinasi (AOX) pada Perairan di Sekitar Industri Pulp and Paper, Berita Selulosa Vol 43 (1) hal 29-38 Juni 2008 ISSN 00059145

<sup>10</sup>Article 14 paragraph (1) of GR No. 82 regarding Water Pollution Control

<sup>11</sup>There is also Ministry of Environment Decree No. 115 of 2003 regarding Guidelines on Determination of Water Quality Status

**Furthermore**, upon such conditions, there is no information regarding what the community should do in consuming such waters;

b) The cumulative environmental impact is not analyzed properly in AMDAL/EIA, as well as in the supervision conducted by the Government;

#### **4. Permits**

- a) The process of permit issuance regarding waste dumping<sup>12</sup> to Ciujung River does not inform and involve the impacted community<sup>13</sup>;
- b) The format of the waste dumping permit is very simple compared to the format required in other country (i.e. USA);
- c) Extension of liquid waste dumping permit by the Regional Government is not based on the result of work and compliance assessment related to the environment.

#### **5. Supervision and Legal Enforcement towards the Business Activity**

- **There are certain violations conducted by PT IKPP related with effluent standards as follows (Attachment 7):**
  - Term of 11 – 20 May 2011 (COD above the standard) at the outlet waste water treatment 2;
  - Term of 11 – 20 May 2011 (TSS and COD above the standard) at the outlet waste water treatment 3;
  - Term of 10 – 20 June 2011 (TSS, COD and BOD above the standards) at the outlet waste water treatment 1;
  - Term of 10 – 20 June 2011 (TSS, COD, BOD above the standards) outlet waste water treatment 2;
  - Term of 10 – 20 June 2011 (TSS, COD above the standard) combination of outlet waste water treatment 1 and 2;
  - Term of 10 – 20 June 2011 (TSS above the standard) at the outlet waste water treatment 3;
  - Term of 10 – 20 June 2011 (BOD, COD above the standard), combination of outlet waste water treatment 1, 2, 3;
  - Term of 28 June – 8 July 2011 (BOD above the standard) at the outlet waste water treatment 1 and 2;
  - Term of 28 June – 8 July 2011 (TSS above standard) at the joint outlet waste water treatment 1 and 2 left;
  - Term of 3 – 15 August 2011 (BOD above the standard) at the outlet waste water treatment 1;
  - Term of 3 – 15 August 2011 (TSS and COD above the standards) at the outlet waste water treatment 2;
  - Term of 13 – 20 September 2011 (TSS above the standard) at the outlet waste water treatment 2.

---

<sup>12</sup> Decree of Serang Regent no. 658.31/1260/BPLH regarding Grant of Permit of Waste Dumping Extension to PT Indah Kiat Pulp and Paper, Tbk dated 15 July 2011, which grant extension of permit to PT IKPP to dump liquid, solid, and emission waste.

<sup>13</sup> Article 30 par (3) of GR no. 82 of 2001 mandated involvement of community in the process of permit grant.

- Based on Environmental Audit draft dated 2 October 2012, it is found that: a) there are 3 (three) Waste Water Treatments (WWT) at PT IKPP, b) load of organic sludge in the WWT I is 2(two) times higher above maximum standard for active sludge in the pulp and paper industry, c) effluent parameter discharged from Waste Water Treatment II of PT IKPP does not comply with the standard except for pH, d) aerator does not work, f) load of organic sludge in the WWT II is 3(three) times higher above maximum standard for active sludge in the pulp and paper industry, g) effluent parameter discharged from Waste Water Treatment III of PT IKPP does not comply with the standard except for pH, h) stirring motors at flocculation and coagulation process –pre treatment does not work well, i) load of organic sludge in the WWT III is 2(two) times higher above maximum standard for active sludge in the pulp and paper industry<sup>14</sup>;
- Law enforcement on the violation of quality standard and pollution are still weak, on the violations committed by companies are followed by letter of supervision follow up;
- Environmental data and compliance data is heavily reliance on PROPER program and EIA (self monitoring data)

---

<sup>14</sup> Draft Laporan Audit Lingkungan Wajib Pengolahan Air Limbah dari Pabrik Pulp dan Kertas PT Indah Kiat Pulp and Paper TBK (PT IKPP) Serang berkaitan dengan Kualitas Air Sungai Ciujung Di Kecamatan Kragilan, Kabupaten Serang, Provinsi Banten, 2 Oktober 2012